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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G06F	A2	(11) International Publication Number: WO 99/44112
		(43) International Publication Date: 2 September 1999 (02.09.99)

(21) International Application Number: PCT/US99/04244

(22) International Filing Date: 25 February 1999 (25.02.99)

(30) Priority Data:
09/031,966 27 February 1998 (27.02.98) US

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(81) Designated States: CA, JP, MX, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
Without international search report and to be republished upon receipt of that report.

(54) Title: SYSTEM AND METHOD FOR EXTRACTING AND FORECASTING COMPUTING RESOURCE DATA SUCH AS CPU CONSUMPTION USING AUTOREGRESSIVE METHODOLOGY

(57) Abstract

A system and method for extracting and forecasting computing resource data such as workload consumption of mainframe computing resources using an autoregressive model. The system and method foresast mainframe central processing unit (CPU) consumption with ninety–five percent accuracy using historical perfomance data. The system and method also provide an upper ninety–five percent confidence level and a lower ninety–five percent confidence level. The system and method retrieve performance records from a computer platform in one second intervals, statistically collapses the one second performance data into fifteen minute performance data, statistically collapses the fifteen minute performance data into a one week performance data, and generates a time series equivalent to collecting performance data at one week intervals. The system and method ensure that the resulting time series is statistically stationary, and applies an autoregressive construct to the time series to generate forecast of future CPU utilization, as well as to generate reports and graphs comparing actual vs. forecast CPU utilization. Because the system and method rely on electronically generated empirical historical computer performance data as an input, they provide a turnkey solution to CPU consumption forecasting that can be implemented easily by any system network manager.